BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Estimate for Improvements to Roads and Drains at Narasipura in Ward No. 09 (Vidyaranyapura).

			Est Cost Rs.					2500000.00	
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork **excavation by manual means in ordinary soil** involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **Page No. 142 / Item No. 19.1, PWD SR 2016-17**	Cum							
	for drain12th A Main Narasipura		1	60.00	2.00	0.60	72.00		
	Basic Rate	82.00					**72.00**	199.36	**14354.00**
	Add loading and unloading Charges **It No 17.1 KSRRB M 100-1**	68.00							
	Average weight of earth 1.28 tonne / kg for 11.90 Km = 1.28 T X 11.90Km X 2.5 / km= 38.08	38.08							
		188.08							
	Area Weightage @6%	11.28							
	Total	**199.36**							
2	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305 **Page No. 148 / Item No. 19.60, PWD SR 2016-17**	cum							
	for drain12th A Main Narasipura		1	60.00	2.00	0.30	36.00		
	Basic Rate	302.00					**36.00**	320.12	**11524.00**
	Area Weightage @ 6%	18.12							
	Total	**320.12**							
3	KSRRB M400-6.1. Construction of granular sub-base by providing close graded crushed stone aggregates of granite / trap / basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method. - For Grading II Material **Page No. 154, Item No. 20.4.2 PWD SR 2016-17**	Cum							
	for drain12th A Main Narasipura		1	60.00	2.00	0.30	36.00		
	Basic Rate	1571.00					**36.00**	1665.26	**59949.00**
	Area Weightage @ 6%	94.26							
	Total	**1665.26**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
4	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix 1:4:8** with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page No.12, Item No. 4.3 of PWD SR 2016-17**	Cum							
	for drain12th A Main Narasipura		1	60.00	6.00	0.15	54.00		
	Basic Rate	4867.00					**54.00**	5159.02	**278587.00**
	Area Weightage @ 6%	292.02							
	Total	**5159.02**							
5	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. **- M20 (at 300Kg per cum coarse aggregate @ 0.64cum and fine aggregate @ 0.43cum) Page No. 177 / Item No. 22.6.2 PWD SR 2016-17**	Cum							
	for drain12th A Main Narasipura		1	60.00	6.00	0.125	45.00		
	Cross Road		1	80.00	6.00	0.125	60.00		
	12th Main		1	100.00	6.00	0.125	75.00		
	Basic Rate	5197.00					**180.00**	5508.82	**991588.00**
	Area Weightage @ 6%	311.82							
	Total	**5508.82**							
6	KSRB 4-6.4 : Providing and removing **centering, shuttering, strutting, propping** etc., and removal of form work for **vertical surface** such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 **Page No. 15 / It No. 4.31 PWD SR 2016-17**	Sqm							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	for drain12th A Main Narasipura		2	60.00		0.30	36.00		
	Cross Road		2	80.00		0.15	24.00		
	12th Main		2	100.00		0.15	30.00		
	Basic Rate	293.00					**90.00**	310.58	**27952.00**
	Area Weightage @ 6%	17.58							
	Total	**310.58**							
7	**Vaccum de-watering** with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift. **Page No. 177 / Item No. 22.7, PWD SR 2016-17**	Sqm							
	for drain12th A Main Narasipura		2	60.00	6.00		720.00		
	Cross Road		2	80.00	6.00		960.00		
	12th Main		2	100.00	6.00		1200.00		
	Basic Rate	90.00					**2880.00**	95.40	**274752.00**
	Area Weightage @ 6%	5.40							
	Total	**95.40**							
8	Providing **precast slab of 100 mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge- Data rate	Sqm							
			260	0.90	0.60		140.40		
			257	1.20	0.60		185.04		
							325.44	1820.56	**592483.00**
	Sub Total								**2251189.00**
	KRIDL Charges @ 10%								**225119.00**
	Labour Cess @ 1%								**22512.00**
	Add for unforseen and rounding off	L/S							**1180.00**
								Total	**2500000.00**

Rupees Twenty five lakhs only

Certificate:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2016-17.
3 This work included under 2017-18 24.10 % Grant.
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

ADMINISTRATIVE APPROVAL
Accorded For Rs. Twenty five lakhs only
Head of A/c..... P-1878
Div. Ref. No. 51/17-18 Date. 11/12/17
AE 11/12
EE(BTP) 11/12

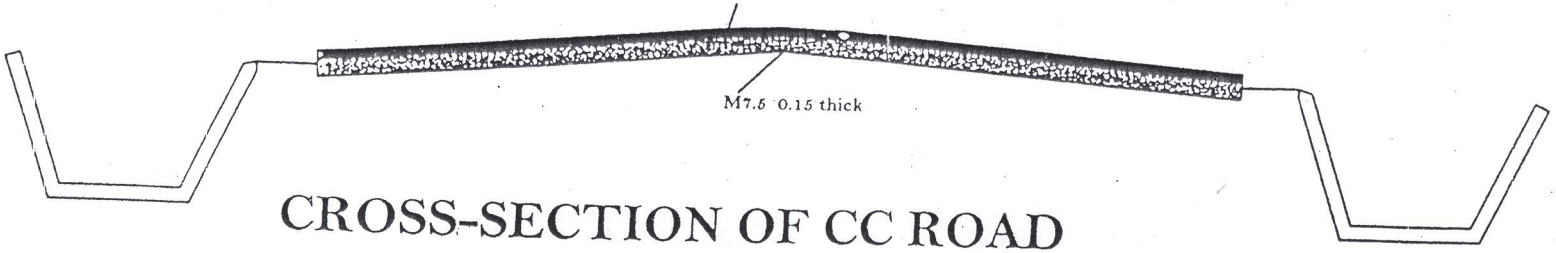
Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Technical Sanction
Accorded For ..... 25.00 lakhs
Head of A/C..... P1878
CER NO :..... 4/18 Dt:..11/12/17

TA
CE (YNK)

NAME OF WORK:-

Improvements to Roads and drains at Nanasipura in ward no: 9.



CROSS-SECTION OF CC ROAD

INDEX

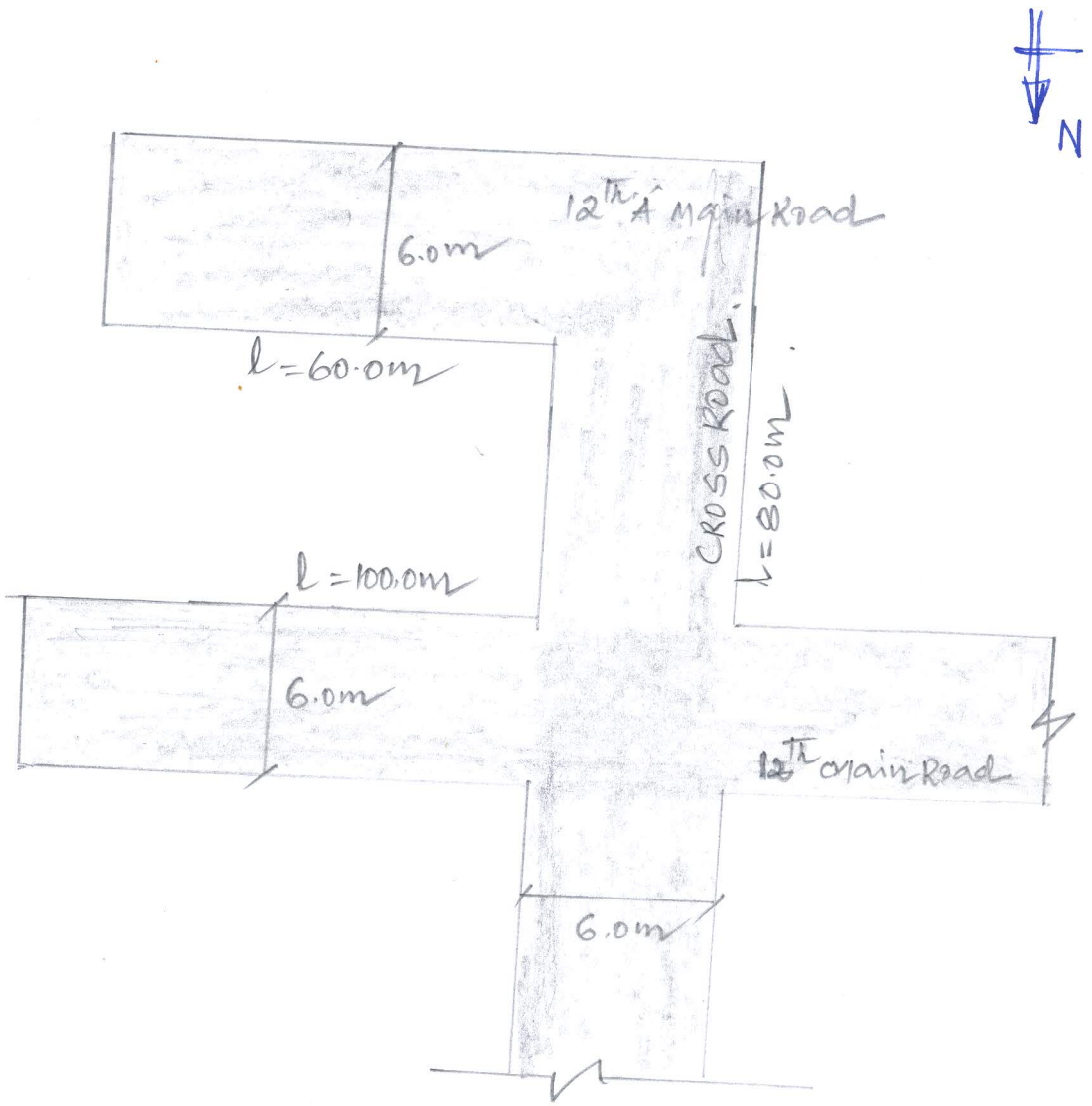
M7.5 1:4:8 0.15m Thick

M20 1:1.5:3 0.10m Thick

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER
VIDYARANYAPURA SUB DIVISION.

Name of work: Improvements to Roads and drains at Narasipura in ward no: 9.



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